

Abstract of the Disclosure

In an optical head for writing and reading data on optical discs (mainly CDs and DVDs) with various specifications using different light source wavelengths, the effective light beam size for the light from each light source differs. This leads to a drop in optical efficiency for the light of a narrower effective beam size. This problem is overcome by providing a dichroic beam expander between the light sources and an objective lens, the dichroic beam expander comprising a substrate with an N-stage step- or sawtooth-shaped blazed diffraction grating formed on both sides thereof. The size of the light beams from the two light sources with different wavelengths is increased or decreased in a wavelength-selective manner, so that the light from each light source can be utilized at high efficiencies.